



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733
JAN 12 2004

FRAZIER

Mr. James H. Welsh, Commissioner of Conservation
Office of Conservation
Louisiana Department of Natural Resources
P.O. Box 94275
Baton Rouge, LA 70804-9275

Dear Mr. Welsh:

This letter transmits EPA's end-of-year (EOY) evaluation of Louisiana's Underground Injection Control (UIC) program for Fiscal Year 2003 (FY03). Ms Yulonda Davis, Mr. Mike Frazier, and Mr. Ken Johnson of my staff visited the Baton Rouge offices of the Louisiana Department of Natural Resources' Office of Conservation (OC) Injection and Mining Division (IMD) on September 3, 2003, for end-of-year program discussions with Mr. Joe Ball and Mr. Laurence Bland. Comments on the draft EOY evaluation received from Mr. Ball on November 13, 2003, are incorporated.

The OC UIC staff exceeded all of the grant workplan program activities except the targets for 2-part mechanical integrity tests for Class II wells and compliance reviews for hydrocarbon storage wells and Class III wells. Those minor shortfalls resulted from an engineering staff shortage during part of FY03. I commend your staff for their work to either meet or exceed all other workplan targets.

As part of our oversight evaluation, my staff performed eleven Class II file reviews. The file reviews found no mechanical integrity concerns. However, concerns with high authorized injection pressures are discussed in the attached FY03 evaluation. As part of our evaluation, a joint field investigation of Class II injection wells in northern Louisiana documented several areas where injection zones exhibit unusually high static formation pressures. My staff anticipates similar joint excursions into central and southern Louisiana during FY04. Your staff is commended for their cooperation and for providing requested information in a timely and professional manner.

If you wish to discuss any aspect of the UIC program, please call me at (214) 665-7100 or Mr. Larry Wright at (214) 665-7150. If your staff have specific questions concerning UIC grant performance or program oversight, please contact Ms. Yulonda Davis at (214) 665-7154 or Mr. Mike Frazier at (214) 665-7236, respectively.

Sincerely yours,

Miguel I. Flores
Director
Water Quality Protection Division

Enclosure

cc: Joe Ball, OC/IMD Director, w/encl.
Laurence Bland, OC/IMD Assistant Director, w/encl.

Internet Address (URL) • <http://www.epa.gov>

**FY03 END-OF-YEAR REVIEW
LOUISIANA DEPARTMENT OF NATURAL RESOURCES (LDNR)
OFFICE OF CONSERVATION
UNDERGROUND INJECTION CONTROL (UIC) PROGRAM**

This report details the significant accomplishments of the Office of Conservation (OC) in meeting the FY03 UIC grant workplan commitments between July 1, 2002, and June 30, 2003. State UIC program issues discussed during the end-of-year review are also included:

FY 03 GRANT END-OF-YEAR ACCOMPLISHMENTS:

FY 03 Grant - The approved Federal FY03 allotment for the State of Louisiana's UIC program administered by the OC was \$354,700. LDNR submitted an application for \$695,014 of federal funds. On September 23, 2002, the OC received a partial award in the amount of \$330,079 to start their FY 03 grant as follows:

\$216,079 of the state's remaining FY 02 allocated regular programmatic funds

\$114,000 of FY 02 funds for special projects

- ▶ Microfilm Professional Services (\$35,000)
- ▶ Develop Electronic Field Inspection System (\$30,000)
- ▶ High end database server to host Oracle database (\$33,200)
- ▶ Injection Well Test Gauges (\$2,800)
- ▶ Global Positioning Satellite System (\$13,000)

On April 23, 2003, the OC also received an award of \$84,721:

\$74,486 of FY 03 allocated funds

\$10,235 of FY 02 unobligated balance of federal funds reflected on the Final Financial Status Report dated September 30, 2002.

On June 26, 2003, the OC received an additional award of \$280,214 of FY 03 allocated funds bringing the total award amount under the FY 03 grant to \$695,014.

Workplan Deliverables—Table 1 identifies State program updates and other deliverables required during FY03. All deliverables have been submitted to Region 6 as mandated by the UIC grant workplan. Table 2 provides the degree of accomplishment during FY03 for selected program activities targeted in the FY03 UIC grant workplan.

Table 1.

Grant Deliverable	Due Date	Date Received
Quarterly Reports (EPA Forms 7520)	Oct 30, 2002; Jan 30, 2003 Apr 30, 2003; Jul 30, 2003	Submitted on schedule
FY03 Grant Workplan/Application	Draft: May 1, 2002 Final: June 1, 2002	Draft: April 29, 2002 Final: June 20, 2002
Annual UIC Program Report (FY 02)	July 30, 2002	August 5, 2002
Final Financial Status Report for FY 02	September 30, 2002	September 20, 2002
UIC Well Inventory	December 31, 2002	December 31, 2002
Annual QMP/QAPP Updates*	June 1, 2003	July 29, 2003
UIC Program Regulatory/Statutory Update/Changes	July 30, 2003	July 29, 2003

* The Quality Management Plan (QMP) and Quality Assurance Project Plan (QAPP) are updated annually for tracking any program modifications, concurrences, and/or organizational changes.

FY 2004 WORK PLAN NEGOTIATIONS:

Quality Assurance Annual Update—It is both a regulatory requirement and policy of EPA that all environmental programs conducted on behalf of EPA establish and implement effective Quality Systems. The Quality Management Plan (QMP) and Quality Assurance Project Plan (QAPP) must be updated annually. If both the QMP and QAPP are current and valid, EPA requires each state to annually certify that both plans are current by submitting updated signatory pages and organizational charts as applicable.

LDNR's current QMP (QTRAK #03-398) will expire September 9, 2004. The current QAPP (QTRAK #03-409) will expire on August 20, 2004. LDNR's OC staff is committed to submit to Region 6 annual quality assurance certifications and new signatory pages before the expiration dates.

FY 2004 Grant Allocation—The tentative Federal FY04 funding target for the State of Louisiana's UIC program is \$361,900. This amount changes each year based primarily on the number of reported injection wells by class.

Update on Class V Calcasieu Parish Special Project—The field work by McNeese State University was completed in early 2003. LDNR's OC field inspectors will canvas those facilities identified in the survey as possibly having Class V wells and those that refused to participate in the student survey. The project period ends March 31, 2004.

Table 2. Workplan Target and End-of-Year Accomplishments—Program Activities and end-of-year level of accomplishment for grant related activities.

Program Activity	Well Class	FY03 Target	End-of-Year Values	Target %
MITs (2-PART)	I	21	26	123%
	II (SWD & EOR)	700	690 ⁽¹⁾	99%
	II (Hydrocarbon Storage)	15	19	126%
	III	20	23	115%
ROUTINE INSPECTIONS	I	85	89	104%
	II (SWD & EOR)	850	1,525	179%
	II (Hydrocarbon Storage)	40	38	95%
	III	20	19	95%
WITNESSED MITs	I	85	86	101
	II (SWD & EOR)	750	965	128%
COMPLIANCE REVIEWS	I	40	39 ⁽²⁾	98%
	II (SWD & EOR)	500	787	157%
	II (Hydrocarbon Storage)	35	43	123%
	III	25	31	124%

⁽¹⁾ The shortfall in the Actual Value results from the resignation of an engineering staff member in FY 2003.

⁽²⁾ The Target Value was set in anticipation of receiving and processing an application for an additional Class I well during FY 2003. The application was not submitted until June 2003. Only 39 Class I wells were in existence during FY 2003.

PROGRAM ISSUES:

AOR and MASIP Determinations—During an oversight visit to LDNR on May 12 & 13, 2003, EPA requested information on areas of over-pressurization observed in some fields under LDNR UIC program jurisdiction. The information provided by LDNR included areas where authorized Class II injection activities exceed LDNR's regulatory limitation for maximum authorized surface injection pressure (MASIP) at LAC 43:XIX.405.B.4. Since 1995 and based on an EPA Region 6 memo, LDNR has granted MASIP for individual Class II injection wells up to 90% of a fracture gradient surface pressure using a step-rate test of the injection zone. The initial or current formation pressure (or bottomhole pressure, BHP) is not part of the MASIP process, nor is the BHP requested in any Class II permit applications (LDNR form UIC-2 SWD) or considered in most Class II permit determinations or modifications. Initial formation pressure is also not included as information required for new injection well applications in the State UIC regulations at LAC 43:XIX.405. LDNR typically requests and uses BHP in calculating a migration potential (MIGPOT) or zone of endangering influence when the permitting process for an initial permit or permit modification identifies deficient wellbores within a fixed ¼-mile radius of the subject Class II injection well. Observations of real pressure influence in excess of several miles from authorized injection activities helped form the basis of flexible corrective action in the federal UIC regulations.

Some Class II disposal wells that existed prior to Louisiana receiving UIC primacy in 1982 [considered as authorized by rule (ABR) in State UIC regulations] have not been reviewed for migration potential, even within a fixed radius ¼-mile area of review (AOR). LDNR UIC regulations only require ABR wells to maintain mechanical integrity [LAC 43:XIX.403.c and 419.c]. A review of EPA Form 7520-3 reported by LDNR between FY99 and FY03 indicates that approximately 54% of the wells tested for mechanical integrity for the five-year period are considered ABR wells. Considering those values, approximately half of the current Louisiana Class II well inventory may have never undergone a basic AOR analysis unless the operator applied for and received authorization for a change of injection zone.

LDNR now requires a step-rate test prior to granting any request for an increase in the MASIP regardless of any "grandfather" status. All Class II wells, including ABR wells, for which authorization to change the injection zone is sought are subject to LDNR's permitting process. However, the State UIC permitting rule applicable to ABR wells at LAC 43:XIX.403.B does not appear to apply specific written regulatory parameters to assure that ABR wells meet the SDWA protection standard:

LAC 43:XIX.403.B—Sub-surface injection or disposal by use of a well as described in §403.A.1 above is prohibited unless authorized by permit or rule. This authorization shall be conditioned upon the applicant taking necessary or corrective action to protect underground sources of drinking water as specified by the commissioner.

The rule appears to condition injection authorization (by either permit or rule) upon corrective action specified by the OC Commissioner. For most ABR wells a determination of necessary

corrective action may never take place. For permitted wells, State UIC program permitting procedures includes an AOR review and may include a migration potential review if deficient wells are identified within the ¼-mile AOR. However, public notice is not required for an increase in MASIP or change of injection zone. Such changes are considered major permit modifications in federal UIC regulations at 40 CFR §144.41.

Two separate and distinct issues exist related to pressure influence:

- (1) Calculation of MASIP focuses on whether authorized injection will create fractures in the injection zone. MASIP is limited by the depth of the upper most perforation, and in some cases, a step-rate test is conducted to actually measure the fracture gradient of the injection zone. Limiting MASIP reduces the risk of fracturing the confining layers that protect underground sources of drinking water (USDWs) from upward migration; and
- (2) Calculation of the pressure influence, or MIGPOT, determines a pressure change, or delta P, for a given radius from the injection well to any deficient wellbores over a period of time, generally 10 years. The calculation predicts the pressure induced in the reservoir that could cause formation fluids to migrate upward, and the calculated pressure must not exceed bottom hole pressure/s of any deficient wellbore/s.

Again, the MASIP calculation is used by LDNR to limit the surface injection pressure to prevent fracturing of the authorized injection zone. By preventing the fracture of the injection zone, the confining layers between the injection zone and the overlying USDWs are also protected from fracture, thus preventing the creation of fractures as potential pathways for formation fluids to migrate upward into USDWs. The calculated MASIP can also be applied to determine an injection rate that is a component of the pressure influence calculation (MIGPOT). The MIGPOT calculation formula used by LDNR is equivalent to the modified Theis equation in the federal UIC regulations at 40 CFR §146.6 and "Waste Disposal Well Integrity Testing and Formation Pressure Build-Up Study" by Julius Langlinais, September 30, 1981. Further review and discussion of pressure influence determination for ABR wells is planned.

EPA's file reviews for this year's evaluation initially focused on a list of fields provided by LDNR staff that exhibited high calculated MASIPs. The provided information included a May 20, 2002, internal LDNR memo listing "fields where operators could not inject with calculated MASIPs." The memo also stated that most operators "overcame the problem" of not being able to inject with calculated MASIPs by running step rate tests. Initial calculated MASIPs are based on the equations of Ben Eaton. However, Ben Eaton's equations are not well suited for North Louisiana. Therefore, MASIPs are initially assigned using Eaton's equations and only considered for amendment at the request of the well operator after operator performance of a Step-rate test evaluated by OC's Injection and Mining Division (IMD). Such step rate tests were

then used to calculate new MASIPs for the wells in the following list taken from the May 20, 2002, internal memo (field numbers in parentheses):

FIELD	PARISH
Shongaloo, North Red Rock (8246)	Webster
Haynesville (4451)	Webster/Claiborne
Shongaloo (8238)	Webster
Sarepta (7922)	Webster/Bossier
Carterville (2336)	Webster
Logansport (6156)	Desoto
Caspiana (2360)	Desoto
Elm Grove (3608)	Bossier
Leatherman Creek (5880)	Claiborne

Further discussions with LDNR staff about fields that may exhibit high MASIPs or general over-pressurization of the injection zone yielded the following:

Arkana (0116)	Bossier
Sligo (8358)	Bossier/Webster
Cotton Valley (2944)	Webster
Lisbon (5996)	Claiborne/Lincoln
Spider (8575)	Desoto/Sabine
Holly Ridge (4565)	Tensas
Avondale (0176)	Jefferson

A review of ten (10) wells in several of the above fields showed unusually high MASIPs in relatively shallow depths close to USDWs. The above lists formed the basis of EPA's field visit during July 29-31, 2003, in northern Louisiana.

EPA worked with LDNR staff in planning subsequent field observations of current fluid levels and formation pressures in authorized injection zones. EPA provided the information to LDNR during its formal FY03 end-of-year evaluation on September 3, 2003. Observations ranged from static fluid levels well above the base of USDWs to near the surface in some instances, and static formation pressures ranging between 550 and 975 psi (pounds per square inch) gauged at the surface. Even though calculated MASIPs indicate that the resulting formation pressure may not actually cause fractures in the authorized injection zones, the potential for the pressure increases to cause fluids to migrate from the authorized injection zone through any artificial penetrations outside the fixed radius ¼-mile area of review (AOR) may be problematic.

As mentioned previously, some of the injection wells that exhibited static fluid levels near the surface or above the base of area USDWs have never undergone even the basic fixed radius

¼-mile area of review (AOR) because they existed prior to Louisiana gaining UIC primacy in 1982, i.e., authorized by rule. Many of those injection wells have subsequently gained amended authorization to inject into shallower zones without being adequately reviewed for pressure influence impact or subjected to additional public participation. In these cases, LDNR removes the well from ABR status, requiring the operator to file for a change of zone and performs an AOR within a ¼-mile radius. Fluid levels are required depending on wellbore configuration and/or deficient wellbores in AOR review. In addition, increases in surface pressure above Eaton's correlation can only be granted after conducting a Step Rate Test. Wells observed with static fluid level near the surface operate with relatively low MASIPs only because the injection zone is highly porous and permeable allowing the operator to dispose of produced salt water with low pressures at the surface. However, a possible threat exists because the static fluid levels are well above the base of local USDWs in areas where unevaluated artificial penetrations may exist.

A random file review also found a MIGPOT (pressure influence) calculation for the Boise Southern A SWD well #2 (serial number 178318) in Starks Field (8687), Calcasieu Parish. The MIGPOT calculation was performed following a September 2000 wireline service report showing a static fluid level at 76 feet below surface with the lowermost USDW at 750 feet. A basic pressure influence calculation using the file parameters resulted in a radius of influence of about ½ mile. LDNR's subsequent technical evaluation found 13 deficient wells within the fixed ¼-mile radius. The file showed no corrective action requirements either to reduce the pressure influence or cause the plugging of the identified wells.

Subsequent record reviews by LDNR indicate the nearest wellbore is 187 feet from the Boise Southern SWD. The nearest well was completed with a 10.1 ppg mud (typical). Using only 9 ppg, a column of mud in the deficient wellbore exerts a fluid pressure of 833 psi. MIGPOT calculation for a radius of 187 feet at a rate of 1500 bbl/day and 10 years of injection is only 750 psi. This overbalanced situation will prevent upward migration. In addition, brines in this field typically contain high levels of iron sulfide (resulting from the sulphur caprock) that could cause high skin loss (bacteria/ slime) at the face of the well bore; this potential skin damage may explain the high fluid level measured in September 2000. This particular well is scheduled for plugging.

EPA's observations of LDNR's current methods indicate that MASIP is limited by the calculated or estimated fracture gradient of the injection zone. When no problem wells exist within ¼-mile of an injection well authorized by rule, no pressure influence (MIGPOT) calculation is typically performed. Although MASIP is not a specific variable in LDNR's MIGPOT formula, a change in MASIP can influence the injection rate, Q (barrels per day), used in LDNR's MIGPOT calculation.

OC/IMD considers the limiting of MASIP as a technical determination in preventing fracture of the injection zone and overlying confining layers. Since injection pressure is a function of injection rate, OC/IMD considers limiting MASIP as regulating maximum injection rate. Injection rate, Q, is directly limited in special cases when a permit to inject is "rate dependent"

and is thereby assigned a maximum injection rate. Many injection wells included in EPA's FY99 review of Louisiana's UIC Primacy program exhibit pressure influence well beyond the fixed ¼-mile AOR. The Region 6 review recommended revisions to the program to address such high risk threats to USDWs regardless of when the well received UIC authorization.

LDNR's 1982 UIC Primacy program description (PD) includes both AOR (page 84) and corrective action (pages 94-95) criteria applicable to UIC applications. For Class II injection wells, the PD limits the AOR to a fixed ¼-mile radius around the injection well and the applicant must (page 84) "prescribe a plan of corrective action for unplugged wells as a condition of the permit." The 1982 PD (page 95) also appears to limit corrective action to within the ¼-mile fixed radius: "The Commissioner may require as a permit condition that injection pressure be so limited that pressure in the injection zone does not exceed hydrostatic pressure at the site of any improperly completed or abandoned well within the area of review." [Emphasis added.]

By limiting the scope of corrective action to ¼-mile around the injection well, the permitting process does not consider the impact of BHPs great enough to cause fluids to move into USDWs through improperly completed or abandoned wells beyond the ¼-mile radius. Limiting corrective action to a fixed radius even when the calculated pressure influence may cause fluids to migrate upward through pathways outside the ¼-mile radius could be viewed as a deficiency in any UIC program. Since the federal UIC regulations concerning this issue are unclear, Region 6 continues to seek national guidance concerning the effectiveness of limiting corrective action to ¼-mile when the pressure influence is greater.

Region 6 oversight finds the same concern with other Class II UIC State programs as well, and the issue is an EPA Headquarters approved project topic for EPA's National UIC Technical Workgroup (NTW). Region 6 anticipates that the NTW will make a recommendation for national guidance within the next 6 months. In an effort to expand dialogue between Region 6 and State Class II programs on this AOR issue, Region 6 also hosted an AOR summit in which LDNR participated (see below). Further dialogue between EPA and LDNR on the pressure influence of authorized injection activities is anticipated to assure that the Louisiana UIC program represents an effective program to prevent underground injection which endangers drinking water sources as required by Safe Drinking Water Act (SDWA) §1425.

MITs Performed Compared to Inventory—During FY02, LDNR notified operators of approximately 300 Class II injection wells previously identified as not complying with the minimum 5-year mechanical integrity test (MIT) requirement (LAC 43:XIX.419.C.5). The number of total wells increased by 20 from FY02 into FY03. Most of these wells existed prior to Louisiana receiving UIC Primacy and most are also completed without packer and tubing. As a follow-up issue carried over from FY01, the State program achieved compliance with the MIT requirements for all of these wells during FY03. Table 3 summarizes the cumulative efforts of the OC/IMD in resolving this issue from FY02 through FY03.

In FY03, OC performed 690 of the targeted 700 2-part MITs (see Table 2). LDNR's five UIC field inspectors perform the first part of an MIT, a test of the annular space between the tubing and casing, witnessing 965 1-part MITs during FY03. Based on the number of MITs performed during the last five years compared to the number of wells subject to the MIT testing requirement, most if not all Class II wells in Louisiana were evaluated for mechanical integrity during the last five years (see Table 4). In addition, EPA's oversight file reviews found no MIT issues in the 11 UIC wells reviewed this year.

The State program believes the statistical differences shown in Table 4 between the number of Class II wells tested for mechanical integrity and the annual UIC well inventory between 1996 and 2000 is partly due to the way in which the OC/IMD reports the well inventory. The OC/IMD historically reports the total UIC well inventory by the various classes of injection/disposal wells as requested by EPA near the end of each calendar year. However, as footnoted in Table 5, 224 permitted UIC Class II wells are exempt from mechanical integrity testing by Orders of the Commissioner of Conservation because no USDW exists in the vicinity of the wells. Additionally, the footnotes in Table 4 and the inventory values in Table 5 show over 173 orphaned Class II wells in Louisiana, an increase of three wells from FY02. Although orphaned injection wells in Louisiana are included in the state UIC well inventory, no mechanical integrity tests are performed on these wells because no responsible party exists.

Table 3. Number of wells and method of compliance for wells found non-compliant with the five-year MIT requirement during FY02 and FY03.

	<u>FY 02</u>	<u>FY 03</u>
<u>Wells misidentified in injection well database as completed without a packer and have since been tested</u>	<u>10</u>	<u>12</u>
<u>Wells with Radioactive Tracer Surveys or Pressure Tests run</u>	<u>77</u>	<u>91</u>
<u>Wells re-completed with tubing and packer</u>	<u>57</u>	<u>102</u>
<u>Wells plugged and abandoned</u>	<u>44</u>	<u>74</u>
<u>Wells shut-in and sealed by OC/IMD with closure bonding provided by operator</u>	<u>16</u>	<u>9</u>
<u>Wells in offshore fields exempt from testing due to no USDW in area</u>	<u>21</u>	<u>19</u>
<u>Wells shut-in and sealed by OC/IMD with operator's Authority to Transport Oil (Form R-4) suspended for failure to comply with OC/IMD's directive to prove well mechanical integrity</u>	<u>4</u>	<u>0</u>
<u>Well converted from enhanced oil recovery injection to production status</u>	<u>1</u>	<u>2</u>
<u>Well Orphaned</u>	<u>1</u>	<u>4</u>
<u>Wells permitted for re-completion with tubing and packer</u>	<u>14</u>	<u>0</u>
<u>Wells permitted for plug and abandoning</u>	<u>8</u>	<u>0</u>
<u>Operators of wells have been notified, but, time to comply has not expired</u>	<u>40</u>	<u>0</u>
<u>Totals Wells Identified</u>	<u>293</u>	<u>313</u>

Table 4: Number of Class II MITs (2-part) conducted between FY96 and FY03, annual inventory, and well variance between number of five-year MITs and annual inventory.

Fiscal Year	'03	'02	'01	'00	'99	'98	'97	'96
Annual MITs (2-part)	690 ♦	489	769	818	573	649	571	857
Cumulative MITs (5-year periods)	3,339	2,649	2,160	1,391	573			
		3,298	2,809	2,040	1,222	649		
			3,380	2,611	1,793	1,220	571	
				3,468	2,650	2,077	1,428	857
					3,524	2,951	2,302	1,731
					--	3,830	3,181	2,610
					--	--	3,879	3,308
					--	--	--	4,592
Annual Inventory	♣ 3,139	♣ 3,086	3,314	3,779	3,791	3,956	3,995	3,883
Variance (MITs v. Inventory)	† 200	† 212	66	(331)	(267)	(126)	(116)	709

♣ State UIC program well inventory of testable Class II wells as of June 30, 2002 (end of state fiscal year); see Table 5.

† Variance based on State UIC program well inventory of wells subject to MIT as of June 30, 2002.

♦ Low value partially a result of resignation of an engineering staff member as reported in State annual UIC report, page 6.

TABLE 5.
LOUISIANA UIC INJECTION/DISPOSAL WELL INVENTORY
6/30/2003 (End of State Fiscal Year 2003)

WELL CLASS	WELL TYPE DESCRIPTION	FACILITY	WELLS- Under Construction	WELLS- Active	WELLS- Active But Exempt From Testing	WELLS- Temporarily Abandoned	WELLS- Orphaned	WELLS- Plugged & Abandoned
1	HAZARDOUS WASTE	7	0	18	0	0	0	53
1	NON-HAZARDOUS WASTE	12	3	22	0	0	0	28
2	SALTWATER DISPOSAL		26	2,541	34	12	180	2,702
2	ENHANCED RECOVERY		3	493	190	17	13	1033
2	HYDROCARBON STORAGE (Liquids Only)	3	0	88	0	0	0	6
3	IN-SITU MINING, ETC.	14	8	66	0	0	0	2,244
5	ALL OTHER WELLS		34	98	0	0	0	122
SUBTOTAL WELLS			74	3,326	224 ♣	29	193	6188

TOTAL WELLS REGULATED	3,846
Class II Wells Subject To MITs	3,139

♣ Wells are exempt from mechanical integrity testing by Orders of the Commissioner of Conservation. The exemption is granted because no USDW exists in the area of the wells.

Update of Program Review Action Plan—The status of the action plan proposed in EPA's FY99 review of Louisiana's UIC Primacy program is summarized in LDNR's UIC grant workplan for FY04. Toward finalizing an appropriate action plan to address the cited program issues, OC/IMD commits to submit a second draft action plan as a deliverable in the FY04 UIC grant workplan [II. Program Element 1—Program Administration, A.1.A]. Region 6 remains ready to provide assistance as needed to the State program in developing the action plan.

Revisions to LA State UIC Program—On September 10, 2002, Region 6 provided comment to LDNR concerning program revisions related to new Federal Class V regulations. Following input from Region 6 legal counsel, the Region plans to request and forward a final draft revision package to EPA Headquarters for comment, then request formal submission leading to EPA approval.

The Class II portion of the State UIC program also needs revision based on recent regulatory changes involving fracture slurry injection, oilfield waste disposal in a solution-mined salt cavern, certain waste monitoring requirements, and the possible impact of SB 1052 [LSA - R.S. 30:5(D)(5)] on the UIC program. Any draft Class II revision submission should include all applicable changes that may impact the State program since the Region's last revision approval in 1995. EPA's letter of September 26, 2002, explains the rationale for requesting a complete program revision package.